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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,964	12/22/2005	Kentarou Takeda	053498	3100

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EXAMINER

KIANNI, KAVEH C

ART UNIT	PAPER NUMBER
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2883

MAIL DATE	DELIVERY MODE
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01/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,964

Applicant(s)

TAKEDA ET AL.

Examiner

Kianni C. Kaveh

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-11 and 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☒ Claim(s) 2 and 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's election without traverse of claims 1-5 and 12-14 in a paper submitted on 10/25/07 is acknowledged. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation 'the retardation layer (b)' in the 2nd line of the claim. There is insufficient antecedent basis for this limitation in the claim. Correction is required.

Allowable Subject Matter

Claims 2 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein: each cholesteric liquid crystal layer is a single layer; and a helical pitch of the helical configuration of the liquid crystalline molecules of each cholesteric liquid crystalline layer varies continuously along a thickness of the layer so that each cholesteric liquid crystal layer can selectively reflect circularly polarized light in a broadened wave range in combination with the rest of the limitations of the base claim. Claims 12-14 are allowable in virtue of dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being 102(e) as being anticipated by Umeya (US 2003/0174276; also analogously by US 7075598).

Umeya teaches an optical element, (see fig. 1) comprising: at least two laminated circular-polarization-type-reflection polarizers (a) whose wavelength bands for selective reflection of polarized light overlap one another (see fig. 1-2 and abstract), wherein the at least two circular-polarization-type-reflection polarizers (a) each have a side capable of selectively reflecting a relatively short wavelength in the wavelength bands for

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selective reflection, and the sides of said at least two circular-polarization-type-reflection polarizers (a) capable of selectively reflecting the relatively short wavelength are arranged opposite to each other (see at least fig. 1-2 and abstract); wherein the circular-polarization-type-reflection polarizer (a) comprises a cholesteric liquid crystal material (see abstract); wherein the selective reflection wavelength of the at least two circular-polarization-type-reflection polarizers (a) are overlapped in the wavelength range of 550 nm. \pm 10 nm. (see at least fig. 2 and 0031); wherein the retardation layer (b) is at least one selected from the group consisting of: a layer of a cholesteric liquid crystal phase having a selective reflection wavelength band in a range other than the visible light range and having a fixed planar alignment; a layer of a rod-like liquid crystal having a fixed homeotropic alignment state; a layer of a discotic liquid crystal having a fixed alignment state of a nematic phase or a columnar phase; a layer of a biaxially-oriented polymer film; a layer of a negative uniaxial inorganic layered compound having an optical axis aligned and fixed in the normal direction of a plane; and a film produced with at least one polymer selected from the group consisting of polyamide, polyimide, polyester, poly(etherketone), poly(amide-imide), and poly(ester-imide) (see at least 0031, 0063).

Citation of Relevant Prior Art

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

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US 20050151896 A1

US 20050180017 A1

US 7317498 B2

US 20070014127 A1

US 7148513 B2

US 20020113921 A1

US 7256847 B2

US 20040145690 A1

US 20040223102 A1

US 20050249890 A1

US 20030076466 A1

US 20030174276 A1

US 7075598 B2

These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kianni C. Kaveh whose telephone number is 571-272-2417. The examiner can normally be reached on 9:30-19:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Cyrus Kianni
Primary Patent Examiner
Group Art Unit 2883



K. CYRUS KIANNI
PRIMARY PATENT EXAMINER

January 17, 2008
